

*In the Claims:*

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Claim 7. (once amended) The crystal oscillator of claim 6, further including:

a non linear buffer amplifier, cascaded after the linear buffer amplifier such that the differential sinusoidal output signal is transformed into a differential periodic reference signal in operative response to the differential sinusoidal output signal from the linear buffer amplifier.

Claim 8. (once amended) A crystal oscillator, including:

a resonator circuit, defining a symmetrical pair of output terminals;

an active oscillator circuit, coupled to the resonator circuit output terminals, and thus creating differential sinusoidal signals at the symmetrical pair of output terminals;

a linear buffer amplifier, coupled to receive the differential sinusoidal signals thus created by the resonator circuit and active oscillator circuit interaction, and providing a differential sinusoidal output signal at a pair of output terminals; and

a non linear buffer amplifier, cascaded after the linear buffer amplifier such that the differential sinusoidal output signal is transformed into a differential periodic reference signal in operative response to the differential sinusoidal output signal from the linear buffer amplifier.

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